

Determinants of Profitability: Evidence of the Pharmaceutical Industry in Indonesia

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Article History:

Submitted: 05.04.2020

Revised: 11.05.2020

Accepted: 21.06.2020

ABSTRACT

The study aims to estimate and analyze the impact of financial performance on the profitability of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2014-2018 period. Financial performance is measured by current ratio (CR), fixed asset turnover (FATO), total asset turnover (TATO), and debt to equity ratio (DER), while profitability is measured by return on assets (ROA). The method of data analysis uses a multiple linear regression model of 9 pharmaceutical sub-sector companies selected based on criteria determined in the purposive sampling technique. Based on the results of the study it can be concluded that partially CR, TATO and DER have a negative effect on ROA, while FATO has a positive effect. Simultaneous testing shows that all financial ratios consisting of; CR, FATO, TATO, and DER influence ROA. The results of the research

have the implication that in order to improve the performance of the profitability of pharmaceutical companies, the financial manager increases the efficiency of the use of fixed assets, reduces the use of long-term debt, and does not hold current assets for too long because it has an impact on company profits

Keywords: Return On Asset, Current Ratio, Fixed Asset Turnover, Total Asset Turnover, and Debt to Equity Ratio

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DOI: [10.31838/srp.2020.6.89](https://doi.org/10.31838/srp.2020.6.89)

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INTRODUCTION

Background

The manufacturing industry is the various types, including the pharmaceutical industry manufacturing industry which

is also one of the industries that occupy the largest position for the companies listed on the Indonesia Stock Exchange (IDX). The following is the probability of pharmaceutical companies are listed on IDX in 2014-2018:

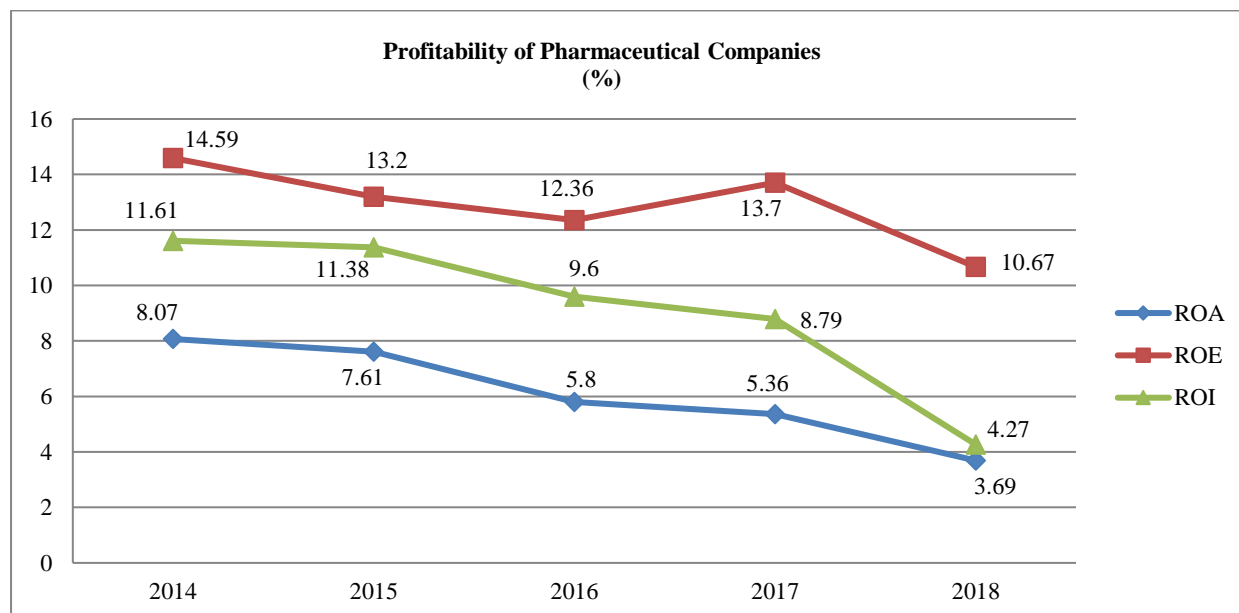


Figure 1: The Profitability of Pharmaceutical Companies in 2014-2018

Profitability of the ratios indicate of the operational to ability of the company to manage it is assets with the ultimate goal of optimizing the returns that can be obtained by providers capital (Sari & Endri, 2019). The company's of the profitability is measuring by the Return On Asset (ROA), Return On Equity (ROE), and Return On Investment (ROI) presented to the figure 1. It is saw the profitability of pharmaceutical company fluctuates and there is a decline. Based on data of ROA, ROE, and ROI of pharmaceutical companies that have decreased five years

because of the company has not been able to utilize it is assets, equity or capital as well as the investment value of the company also has not been able to be properly managed to increase the profit of pharmaceutical companies which are successively seen in 2018 ROA of pharmaceutical companies decreased from 1.67% in the previous year, while ROE of pharmaceutical companies decreased from 3.03% in the previous year, and ROI of pharmaceutical companies decreased from 4.52% in the previous year. This was also strengthened by GP Pharmacy. According to the

Association of Indonesian Pharmaceutical Companies (GP Pharmaceutical), the growth of the national pharmaceutical industry has decreased. GP Pharmacy assesses there is an error in understanding about medicine where so far the wrong perception is related to the policy. In fact, medicines are part of pharmaceutical products that also require production costs such as for the procurement of raw materials, as well as packaging. Meanwhile, from the data summarized by Fauzia (2018), a number of national pharmaceutical companies are indeed facing slowing business growth. As with PT Kalbe Farma Tbk, the company experienced a slowdown in business growth from the 2015-2016 period reaching 14.7 percent, while in 2016-2017 the company's sales growth was only around 4.5 percent. PT Kimia Farma, Tbk also experienced a similar condition. In the 2015-2016 period, revenue growth reached 21.36 percent, and in the following year, growth grew to 17.8 percent. Also in 2020 other unexpected factors such as Covid-19 which is have quite an effect on the assets of the pharmaceutical companies, when though the pharmaceutical sector is part of the existing strategic industries and has a vital role to support health services in each country. Health is something that is very important and valuable for human survival in the world. Pharmaceutical and health companies are expected to continue to contribute in producing quality and good medicinal products to cure people of various diseases that exist today. Indonesia as a country that has a high level of economic growth in Southeast Asia, places that the pharmaceutical industry is the main pillar in maintaining the stability of the nation and the health of its people. To occupy the stability of these pillars, pharmaceutical companies are demanded be able to survive by achieving be the best possible goals and being to able to compete for the global market. The most important thing is in improving of the company's of financial performance, oversight of the financial performance or commonly referred to as a good corporate financial ratio to able to provide good profits also the company (Endri et al. 2020). The improving of the financial performance to certainly depends on every ability of financial management in analyzing the company's financial of the performance reports, because basically these financial statements function as the most important source of information to see the profit or loss of a company (Rinaldo & Endri, 2020). When analyzing the company's financial performance reports, there are several things that must be considered by management, including how the company can create and produce profitability or profit as much as possible within a certain period. According to Triyanti (2019), profitability measures the success of companies earning profits at a specific time through the success of the company and the ability to use assets held for productive activities. To increase profitability, companies must use assets efficiently to be able to generate profits. Profitability measured by ROA is used by companies to measure the financial performance of companies and assess the company's operational performance in utilizing every resource owned by each company (Endri, 2018). ROA is influenced by several factors, namely; liquidity ratios are proxied by the current ratio (CR), the ratio of activities

using fixed asset turnover (FATO) and total asset turnover (TATO), while the solvency ratio is measured using the debt to equity ratio (DER). This study aims to estimate and analyze the effect of CR, FATO, TATO and DER on ROA in pharmaceutical sub-sector companies listed on IDX during the 2014-2018 period.

Research Issues

1. How does the influence of the Financial Ratio (Current Ratio) on the company's ROA?
2. How does the influence of the Financial Ratio (Fixed Asset Turnover) on the company's ROA?
3. How does the influence of the Financial Ratio (Total Asset Turnover) on the company's ROA?
4. How does the influence of the Financial Ratio (DER) on the company's ROA?
5. How does the influence of the Financial Ratio (CR, FATO, TATO, DER) on the ROA of the company?

LITERATURE REVIEW

Previous research related to the influence of CR on ROA, among others conducted by Irman et al., (2020), Astutik & Anggraeny (2019), Vincent et al., (2018), and Barus & Leliani (2013) are still contradictory. Research by Irman et al., (2020) and Astutik & Anggraeny (2019) proves that CR has a direct effect on ROA. Research by Barus & Leliani (2013) concludes that CR has no impact on the ROA of manufacturing companies. Vincent et al., (2018) also proved that CR partially did not have an impact on ROA. According by Warrad & Omari (2015) that FATO had a positive effect on profitability. Meanwhile by Fairfield & Yohn (2001). that FATO has a positive impact on profitability. Meanwhile, according by Vincent et al., (2018) the variable Fixed Assets Turnover partially does not impact on ROA. Study of Al-Jafari & Al Samman (2015) revealed that results the least squares panel model revealed a positive relationship between on ROA, company size, growth, fixed assets and working capital.

According to Alpi & Gunawan (2018) the Total Asset Turnover (TATO) variable display that there is partially significant impact of ROA on the Plastics and Packaging Companies listed on IDX. Meanwhile, according to Sari & Budiasih (2014) Total Assets Turn Over has not impact on profitability. According to Utami (2017) partially TATO has no impact on ROA. Whereas according to Haningsih et al., (2015) states that the results of partial testing for TATO variable has a significant effect on ROA.

According to Wijaya & Isnani (2019) is DER has negative and no significant impact on ROA. That happens because a high Leverage Policy will cause high interest costs to be borne so that it negatively affects profitability (Noor & Lestari, 2016). According to Tailab (2014), DER it is a negative effect on accepted profitability. A negative DER indicates that when DER increases, ROA of the company would decrease. The higher the company uses capital as collateral for debt, the profitability to be obtained by the company will decrease. Meanwhile, according to Wannu et al., (2019) is that partially DER it is negative significant effect on ROA in Property and real estate companies listed on IDX in the 2014-2017 period. Nageswararao et al., (2019)

proves that size, inventory turnover ratio, DER, asset turnover ratio, retained earnings ratio have a negative effect on profitability, while liquidity has a positive effect.

According to Wannay, et al (2019). jointly or simultaneously TATO, DER and CR have a positive impact on ROA in Property and real estate companies listed on IDX in the 2014-2017 period. Meanwhile, according to Vincent et al., (2018), simultaneously FATO, Debt To Total Assets Ratio (DAR) and CR have no effect on ROA in companies Crude Oil and Natural Gas listening on IDX n the period 2012-2017. Meanwhile, according by Amanda (2019) there is a positive effect together FATO and Working Capital Turnover Against ROA Food and Beverage companies in 2009-2015. According by Chander & Aggarwal (2008) that the age, efficiency ratio, past profitability, and research and development intensity are statistically a significant in determining to the profitability of firms on drugs and pharmaceutical industry.

Research Hypothesis

This research, the writer presents a framework for making it easier to understand the problems under study and is presented in the form of a scheme that shows the

relationship of each variable, namely making Current Ratio (CR), Fixed Asset Turnover (FATO), Total Asset Turnover (TATO), and Debt Equity Ratio (DER) in that independent variables and Profitability (Return on Assets) in that dependent variable (ROA). In brief, the frame of mind of this study will be explained in the form of an image as follows:

According to Endri et al., (2019). Hypothesis is a temporary answer the researching problems of formulation. Based with background descriptions, the formulations of the problems, and the purpose of the study as well as the description above, then obtained a hypothesis:

- H1 : Partially CR Influences ROA of Pharmaceutical listed on IDX in 2014-2018.
- H2 : Partially FATO Influences ROA of Pharmaceutical listed on IDX in 2014-2018.
- H3 : Partially TATO Influences ROA of Pharmaceutical listed on IDX in 2014-2018
- H4 : Partially DER Influences ROA of Pharmaceutical listed on IDX Year 2014-2018.
- H5 : Simultaneously CR, FATO, TATO, and DER Influence ROA Pharmaceutical listed on IDX in 2014-2018.

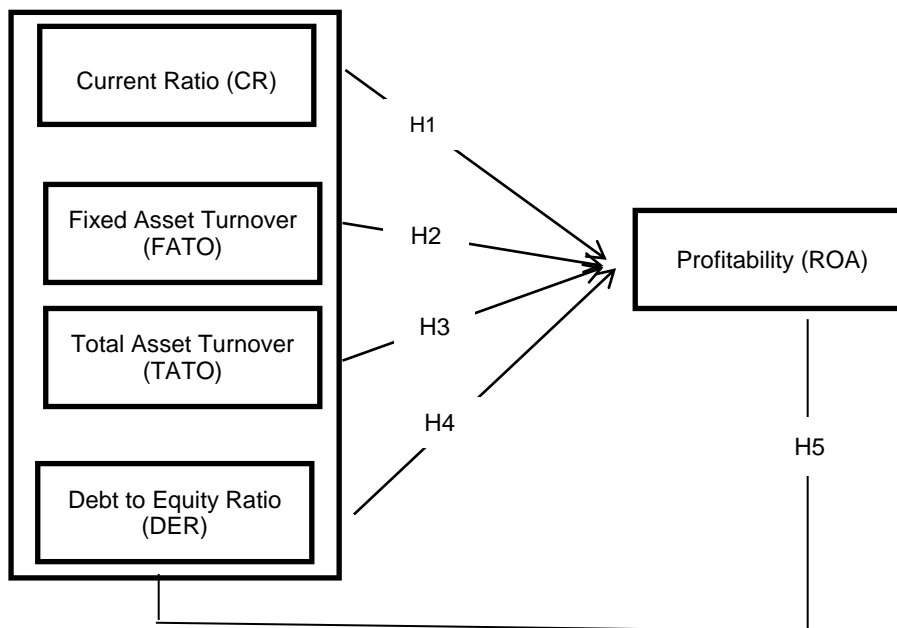


Figure 2: Theoretical Framework

Research methods

The study conducted data analysis based on multiple linear regression methods with data processing using SPSS application software version 24. The multiple linear analysis in this case was processed by using the SPSS application 24 by entering four independent variables consisting of CR, FATO, TATO and DER as well as entering one dependent of variable namely ROA. To measure above variables, it is carried out by using multiple linear regression as follows:

$$ROA = \alpha + \beta_1 CR + \beta_2 FATO + \beta_3 TATO + \beta_4 DER + e$$

Information:

ROA = Return on Asset

α = Constant

CR = Current Ratio

FATO = Fixed Asset Turnover

TATO = Total Asset Turnover

DER = Debt Equity Ratio

e = Standard Error

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficient for each variable

The hypothesis test by using the T test (partially) and F test (simultaneously), According to Ghazali (2013: 98) the statistical of the t test basically display how so far to the impact of the one explanatory or independent variable individual in the describe variation of dependent variable. In the t test there is a t-value with a table. The SPSS output can be saw from the P-value table (in the sig column). If $t_{count} > t_{table}$, then alternative hypotheses are supported, and vice

versa. The actual level used is 5% (Ghozali, 2013: 98). According to Ghozali (2013: 98), the F test is a simultaneous test of the effect of all independent variables on the dependent variable. F statistics can be done by comparing f_{count} with f_{tabel} . If $f_{count} > f_{tabel}$, then the alternative hypothesis is supported (the model is feasible to use), and vice versa. The actual level used is 5% (Ghozali, 2013: 98). In addition there is also a coefficient of determination test to see how far the impact of independent variables on the dependent variable. The variables in cases are Dependent variables namely Profitability (ROA) and Independent variables consisting of CR, FATO, TATO, and DER. The

data by using the author in this research are the secondary data. The sampling technique by using the writer is purposive sampling method, which method is used in the form of samples based on certain criteria. The criteria used by the writer as a sample in this case are pharmaceutical sub sector industrial company that had been listed IDX that have approved financial reports and notes to financial statements analysis as December 31 on a regular basis for the last five years in accordance with the year of research required in 2014 -2018. The following authors present the names and company codes of the pharmaceutical sub-sector which are the sample authors in this study:

Table 1: Companies Code and Companies Name

No	Companies Code	Companies Name
1	DVLA	DARYA VARIA LABORATORIUM TBK
2	INAF	INDOFARMA TBK
3	KLBF	KALBE FARMA TBK
4	KAEF	KIMIA FARMA TBK
5	PHAPROS	PHAPROS TBK
6	PYFA	PIRIDAM FARMA TBK
7	SOBI	TAISHO PHARMACEUTICAL INDONESIA TBK
8	TSPC	TEMPO SCAN PASIFIC TBK
9	MERCK	MERCK SHARP DOHME PHARMA

Source: IDX (2019)

Table 2: Operationalization of Variables

Variable	Definition	Formula
Dependent :		
ROA	ROA is an indicator that is used to determine the ability of companies to earn profits through investments in assets owned by the company (Horne & Wachowicz, 2013: 235).	$ROA = \frac{\text{Earning After Tax}}{\text{Total Asset}}$
Independent :		
Current Ratio (CR)	According by Sutrisno (2013: 222), CR is that to ratio compares the current assets owned by companies with the short-term debt.	$CR = \frac{\text{Current Asset}}{\text{Current Liabillity}}$
Fixed Asset Turnover (FATO)	FATO is one part of the activity ratio which according to Amanda (2019) is that ratio of measures the effectiveness to the company's management in managing it is assets, and the measure of effectiveness a company in using it is fixed assets to obtain sales.	$FATO = \frac{\text{Sales}}{\text{Fixed Asset}}$
Total Asset Turnover (TATO)	According to Alpi & Gunawan (2018) states TATO is using byt the ratio measure of the turnover of all assets owned to the company and measure how many sales are obtained from every rupiah of the assets.	$TATO = \frac{\text{Sales}}{\text{Total Asset}}$
DER	According to Endri et al., (2020) DER is used the ratio to measure how far to the company is spent by creditors.	$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$

Source: Compiled by the Author (2020)

RESEARCH RESULTS AND DISCUSSION

Result

The research outcome are the interpretation the analysis tools used to determine the outcome of the influence of CR, FATO, TATO, and DER on ROA of a pharmaceutical sub-sector that companies listed IDX in 2014-2018.

Descriptivestatistics

Data of 45 the pharmaceutical sector companies listed IDX in 2014-2018 that the period are shown with the following variables in Table 3:

Table 3: The Descriptive Statistics of the Variables

Variables	N	Mean	Std. Dev.	Min	Max
CR	45	16.3350	3.45551	10.19	22.76
FATO	45	2.1098	0.41880	1.28	2.98
TATO	45	10.6972	1.16156	6.96	12.38
DER	45	7.6911	2.68200	4.31	13.81
ROA	45	3.4151	1.70335	0.32	9.60

Source: SPSS Processing Results 24

Based on table 3. The Mean CR from 2014-2018 was 16.3350, while the maximum value for the CR variable was 22.76. The standard deviation is 3.45551 percent lower than the mean current ratio for the 2014-2018 period.

Based on table 3. the mean FATO from 2014-2018 was 2.1098, while the maximum value for the FATO variable was 2.98. The standard deviation is 0.41880 percent lower than the mean FATO for the period 2014-2018.

Based on table 3. the mean TATO was 10.6972 while the maximum value for the TATO variable was 12.38. The standard deviation is 1.16156 percent lower than the mean TATO for the 2014-2018 period.

Based on table 3. the mean DER was 7.6911 while the maximum value for the DER variable was 13.8. The standard deviation is 2.68200 percent lower than the mean DER for the 2014-2018 period. Based on table 3. the mean

ROA from 2014-2018 was 3.4151, while the maximum value for the ROA variable was 9.60. The standard deviation is 1.70335 percent lower than the means ROA for the period 2014-2018.

Normality Test

Data that are normally distributed are shown with significant values above 5%. The results obtained in this study are, based on Kolmogorov Smirnov's approach, it display that the value of CR, FATO, TATO, DER and ROA are not distributed normal. Then the Kolmogorov Smirnov test is carried out by changing all variables into the form of Square Root transform (SQRT), the results obtained by testing the statistical normality of Kolmogorov Smirnov are as follows:

Table 4: One Sample-Kolmogorov-Smirnov Test

		Unstandardized Residual
N		45
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	1.22703506
Most Extreme Differences	Absolute	0.113
	Positive	0.109
	Negative	-0.113
Test Statistic		0.113
Asymp. Sig. (2-tailed)		0.200 ^{c,d}

Source: SPSS Processing Results 24

Based on table 4, above it the concluded Asymp to value. Sig (2-tailed) from the Kolmogorov Smirnov (K-S) test is 0.200. Then it can be concluded that the residual data are normally distributed.

Multicollinearity Test

Multicollinearity test is using to test whether regression capital is found between anther correlation of the independent variables. One to find out the presence or

absence of multicollinearity is used to Variance Inflation factor (VIF) and Tolerance. If the VIF value more than 1 and less than 10 and the Tolerance value (T) is more than 0.1 and less or equal to 1, it means that there is no multicollinearity. Conversely, if the VIF value is more than 10 and the Tolerance value (T) is less than 0.1 or more than 1, it means that multicollinearity can be saw from the following table 5:

Table 5: Multicollinearity Test

Keterangan	Collinearity statistic	
	Tolerance	VIF
CR	0.193	5.169
FA TO	0.735	1.361
TATO	0.557	1.796
DER	0.166	6.025

Source: SPSS Processing Results 24

Base on the multicollinearity test results in table 5 shows that all independent variables in this study have a tolerance value > 0.10 and a VIF value <10. Then the data can be concluded that there is no multicollinearity between the independent variables in the regression model.

Heteroscedasticity Test

Heteroscedasticity test is done by detecting the distribution patterns of residual variants using Scatterplot charts. If scattering points on the graph form a certain pattern then the problem of heteroscedasticity has been identified, but if there is no clear pattern and the points of spread above and below the number 0 on the Y axis are, then there is no problem of heteroscedasticity (Ghozali, 2013: 139) . The following presents an image of the results of heteroscedasticity testing as follows:

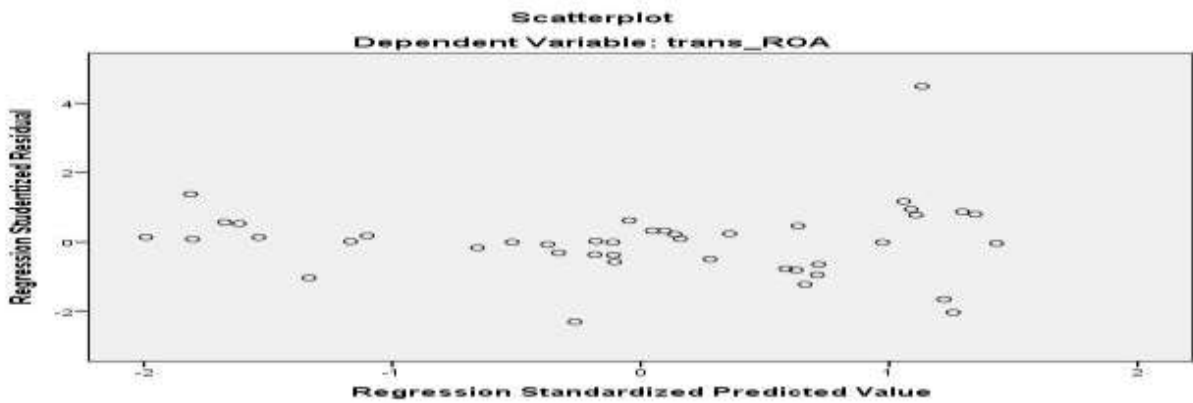


Figure 3: Scatterplot

The results of the Scatterplot graph presented it is above display the points spread randomly and spread above or below the number 0 on the Y axis, and do not have a clear pattern or form a pattern. Based on the picture above, it can

concluded that there is not heteroscedasticity problem the regression model, so that the regression model are feasible as a prediction tool. The following results are obtained from the glacier test in the following table is:

Table 6: Heteroscedasticity with Glecier test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	106.531	26.250		4.058	0.000
	CR	-1.240	0.766	-0.448	-1.618	0.114
	FATO	5.363	3.008	-.235	1.783	0,082
	TATO	-1.816	1.033	-0.509	-1.759	0.071
	DER	-7.057	1.167	-0.857	-6.049	0.086

Source: SPSS Processing Results 24

The table above display the value of sig. of CR, FATO, TATO, DER, each above 0.05, namely (0.114 > 0.05), (0.082 > 0.05), (0.071 > 0.05), (0.086 > 0.05). The conclusion obtained

from the analysis of these data is that there are no symptoms of heteroscedasticity on this study.

Autocorrelation Test

Autocorrelation test using by the whether in linear regression model there's a linear correlation between error of the period (t) intruder and error of the period t-1 (previous) intruder. Testing for the there is or absence of

autokoleration carried out using the Durbin Watson (DW). Autocorrelation is classic assumption of the test that must be performed to obtain a regression result that is feasible to use. The following of the analysis autocorrelation test can be saw in the table 7:

Table 7: Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.694 ^a	0.481	0.425	1.29166	1.938
a. Predictors: (Constant),CR,FITO,TATO,DER					
b. Dependent Variable: Profitabilitas (ROA)					

Source: SPSS Processing Results 24

Based on table 7 above it can be saw that the model used in this case is known that the watson durbin value is 1.938 and is the position between (4-du) and du, which means there is no autocorrelation where (4-1.720) > 1.938 > 1.720. Thus the regression model is stated to fulfill the non-autocorrelation assumption.

Results of the Multiple Linear Regression Analysis

The results of multiple linear regression equation can be saw by interpreting of the part in the Unstandardized Coefficient Beta. After undergoing several tests of the classical assumptions, the results of the multiple linear regression analysis can be saw in the following table 8:

Table 8: Results of the Multiple Linear of Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	11.988	5.173	
	CR	-0.034	0.144	-0.063
	FATO	2.283	0.550	0.574
	TATO	-0.956	0.225	-0.674
	DER	-0.361	-0.215	-0.489

Source: SPSS Processing Results 24

Based on the data in the output results table above, the regression equation is obtained:

The outcome analysis of multiple regression that are still in the form of numbers can be explained in a language that will be easily understood as follows:

a. Constant 11.988

The magnitude of the constant value indicates that if the independent variables are assumed to be zero, then the dependent variable will be worth 11.988. So it can be concluded that the value of the constant ROA of 11.988 without the influence of CR, FATO, TATO, and DER.

b. b1 = -0.034

This means that the CR variable affects ROA by -0.034 or negative effect. If the value of CR variable increases by 1 unit, ROA will decrease by -0.034.

c. b2 = 2.283

Means that FATO variable affects ROA of 2.283 or has a positive effect. If the value of FATO variable increases by 1 unit, ROA will increase by 2.283.

d. b3 = -0.956

Means that TATO variable affects Profitability of -0.956 or negatively affects. If the value of TATO variable increases by 1 unit, ROA will decrease by -0,956.

$$ROA = 11.988 - 0.034CR + 2.283FATO - 0.956TATO - 0.361DER$$

e. b4 = -0.361

Means that DER variable affects ROA of -0.361 or negatively affects. If the value of DER variable increases by 1 unit, ROA will decrease by -0.361.

T Test Results

T test used by to analyze the impact of independent variables consisting of CR, FATO, TATO, and DER partially on ROA with the significance level at 5% (0.05). If arithmetic is greater than t table and the significant value is smaller than the specified significance level of 5%, and then there is a significant influence of the independent variable on the dependent variable, conversely if t arithmetic is smaller than t- table and the significant value is greater than the level of significance which is determined at 5%, then there is no significant impact of the independent variables on the dependent variable. The outcome of the t-test calculation determined with the SPSS 24 program application can be saw in the following table 9:

Table 9: T Test Result

Model		t	Sig.
1	(Constant)	2.317	0.026
	CR	-0.234	0.816
	FATO	4.152	0.000
	TATO	-4.244	0.000
	DER	-1.681	0.101

Source: analysis results

The results of the t-test analysis showed that among the independent variables only FATO variable had a positive impact on ROA variable because the t-value (4.152) > t-table (1.684) and the sig value was smaller than 0.05. So it can be concluded that partially FATO had a positive effect on ROA, while CR and DER partially have a negative and not significant effect on ROA, while TATO has a negative effect on ROA.

The test results of the independent variable on the dependent variable can be analyzed as follows:

1. Based on the SPSS program calculation results obtained t count variable CR is smaller than t-table (-0.234 < 1.684) and the sig value obtained is higher than 0.05 (0.816 > 0.05), thus H1 reads "Partially the Current Ratio affects ROA" is unacceptable and H0 is accepted. then this shows that CR variable had no effect on ROA of the pharmaceutical sub sector companies.

2. The SPSS program calculation results obtained t count variable FATO is greater than t-table (4.152 > 1.684) and the sig value obtained is smaller than 0.05 (0.000 < 0.05), thus H1 reads "Partially FATO has a positive effect on ROA" can be accepted and H0 rejected. then this display that FATO variable has a positive effect on ROA of pharmaceutical sub-sector companies.

3. The SPSS program calculation results obtained t count variable TATO is smaller than t-table (-4.244 < 1.684) and the sig value obtained is smaller than 0.05 (0.000 < 0.05), thus H1 reads "partially TATO affects ROA" can be accepted and H0 rejected. then this display that the TATO variable has a negative effect on ROA of the pharmaceutical sub-sector companies.

4. Based on the SPSS program calculation results obtained t count variable DER is smaller than t-table (-1.681 < 1.684) and the sig value obtained is greater than 0.05 (0.101 > 0.05), thus H1 which reads "partially DER effect on ROA" is not acceptable and H0 is accepted. then this shows that DER variable has a negative and not significant effect on ROA of the pharmaceutical sub-sector companies.

Test Results F

The F-test using by test the significance of the regression coefficient of the independent variables simultaneously on the dependent variable. If the significance of the F-calculated value is higher than the F-table value, it can be concluded that all independent variables simultaneously influence the dependent variable. The f-test results can be seen in the table 10 below:

Table 10: Test Result F

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.227	4	14.307	8.575	0.000 ^b
	Residual	61.730	37	1.668		
	Total	118.958	41			

Source: analysis results

Based on the above table, the calculated F-value is 8.575 with sig. 0.000 so that the F-count value is greater than the F-table (8.575 > 2.61), and the sig value is less than 0.05 (0.000 < 0.05) which means that H5 reads "Simultaneously CR, FATO, TATO, and DER affect ROA" can be accepted and H0 is rejected. So this shows that simultaneously the CR, FATO, TATO, and DER variables had a positive effect on ROA of pharmaceutical companies.

Coefficient Determination (R²)

The coefficient determination (R²) is used to find out how much percentage to relationship of the independent variable to the dependent variable. The magnitude of the percentage of the impact of all independent variables on the value of the dependent variable can be seen from the magnitude of the coefficient determination (R²) of the regression equation. The coefficient of the determination can be seen from the SPSS calculation can be seen in the following table 11:

Table 11: Coefficient Determination (R²)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.694 ^a	0.481	0.425	1.29166

Source: analysis results

Judging from table 11 the coefficient determination (R^2) shows the Adjusted R Square figure of 0.425 or 42.5%, which means that ROA variable can be describe by CR, FATO, TATO, and DER, the remaining 0.575 or 57.5% can be explained by other variables outside in this study.

Discussion of Research Results

1. The Influence of CR on ROA

The results showed that CR has no impact on ROA and result is also in line with research conducted by Vincent et al., (2018) partially CR has not effect on ROA in Crude Oil and Natural Gas companies which is listening on IDX in the period 2012-2017. Meanwhile, according to Irma Melani et al., (2019) states that CR has not effect on ROA in Food and Beverage companies listed on the IDX. This is because there is an error in determining investment in inventory which will emphasize the company's profit so that it can reduce the level of profitability of the company. The CR period has needs to be considered to find out how much time is needed by the company to spend inventory in it is production process, for this reason the longer the inventory turnover period, the more costs will be incurred by the company to keep the inventory turnover remains good. it requires a high level of CR to reduce costs arising from excess inventory and this will ultimately affect ROA of the company.

2. The Influence of FATO on Profitability

The results show that FATO can improve ROA performance and this result is also in line with research conducted by Irman et al., (2020) that FATO can increase profitability. Meanwhile, according by Warrad & Omari (2015). stated that the FATO had a positive effect on ROA in the industrial of sector in Jordan. This proves of that the ROA in component supply companies can increase with fixed asset investment because fixed asset investment has a large investment value and a long period. Investment in fixed assets is directly proportional to profitability, which means profitability will increase if investment in fixed assets increases.

3. The Influence of TATO on Profitability

The results showed that TATO had a negative effect on ROA and this result is also in line with research conducted by Alpi & Gunawan (2018) namely the TATO variable shows that partially there is a significant influence on ROA on Plastic and Packaging Companies listed on the IDX. And according to Irman et al., (2020) states that TATO had a significant effect on ROA. This proves that with the increase in TATO or the better condition of TATO, the ROA of the Company will be good too, which means that investors and creditors will trust and extend the cooperation contract with the company.

4. The Influence of DER on Profitability

The results show that DER has no effect on ROA and this result is also in line with research conducted by Tailab (2014) that DER cannot change ROA. Meanwhile, according to Irman et al., (2020) and Winata et al., (2020) stated that DER also does not affect

ROA. This proves that the amount of long-term debt does not affect the company's ROA.

5. The Influence of simultaneous or together CR, FATO, TATO, and DER on Profitability

The results showed that simultaneous or together CR, FATO, TATO, and DER has a positive effect on ROA. and these results are also in line with research conducted by Trisha According Wannu et al., (2019) that together or simultaneously TATO, DER and CR had a positive on ROA. Meanwhile, according to Mimelientesa Irman et al., (2020) that CR and TATO has a positive effect on the ROA. According to Mohammadzadeha et al., (2013) Current Ratio (CR) and Debt to Equity Ratio (DER) have positive impact on ROA. As well as research by Zatira (2017) there are also positive influences together FATO and Working Capital Turn Over Against ROA. This proves that if the CR increases, the FATO is also large in terms of investment, and the TATO also increases, and a rising or falling DER can increase ROA companies together.

CONCLUSIONS AND RECOMMENDATION

Conclusions

The conclusions from this case are:

1. Partially CR does not affect the ROA of Pharmaceutical Sub Sector Manufacturing Companies that are listed on the IDX in 2014-2018 :
2. Partially FATO had a positive effect on ROA in Pharmaceutical Sub Sector Manufacturing Companies that are listed on the IDX in 2014-2018.
3. Partially TATO has a negative effect on ROA in Pharmaceutical of Sub Sector Manufacturing Companies listed on the IDX in 2014-2018.
4. Partially DER has no effect on ROA in the Pharmaceutical Sub Sector Manufacturing Companies listed on the IDX in 2014-2018.
5. Simultaneously, CR, FATO, TATO, and DER influence ROA in the Pharmaceutical Sub-Sector Industrial Sub-Sector which is listed on the IDX in 2014-2018.

RECOMMENDATION

Based on the results of research, data analysis, discussion, and conclusions that has been drawn, the authors can put forward the following suggestions:

1. For further research, especially those who will examine Profitability (ROA), the authors hope that future researchers can further examine the factors that influence the increase in ROA itself even deeper, especially factors that have not been examined in this research.
2. For companies, it is recommended to optimize the use of assets to generate profits, for example by looking at existing investment opportunities, taking into account the safe limit of the use of debt in accordance to needs of companies and paying attention to current liabilities in order to support the manufacturing the firm Pharmaceutical Sub - Sector that are currently running.
3. To The investors, the results of this case can provide information to investors and potential investors regarding the financial condition of a company,

especially in terms of profits derived from funds invested in current assets and fixed assets of the company.

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